

BIDS
BRAIN IMAGING DATA STRUCTURE

(for EEG)




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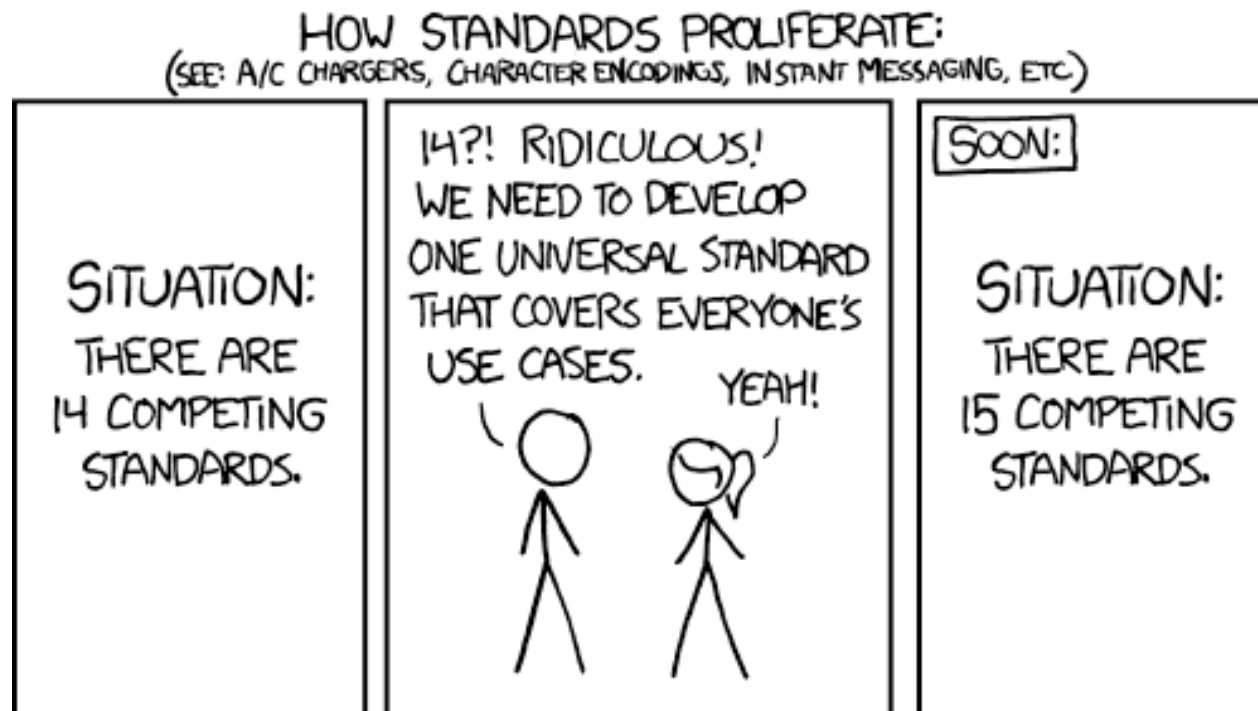
<https://doi.org/10.6084/m9.figshare.14748105>

 @CyrilRPernet
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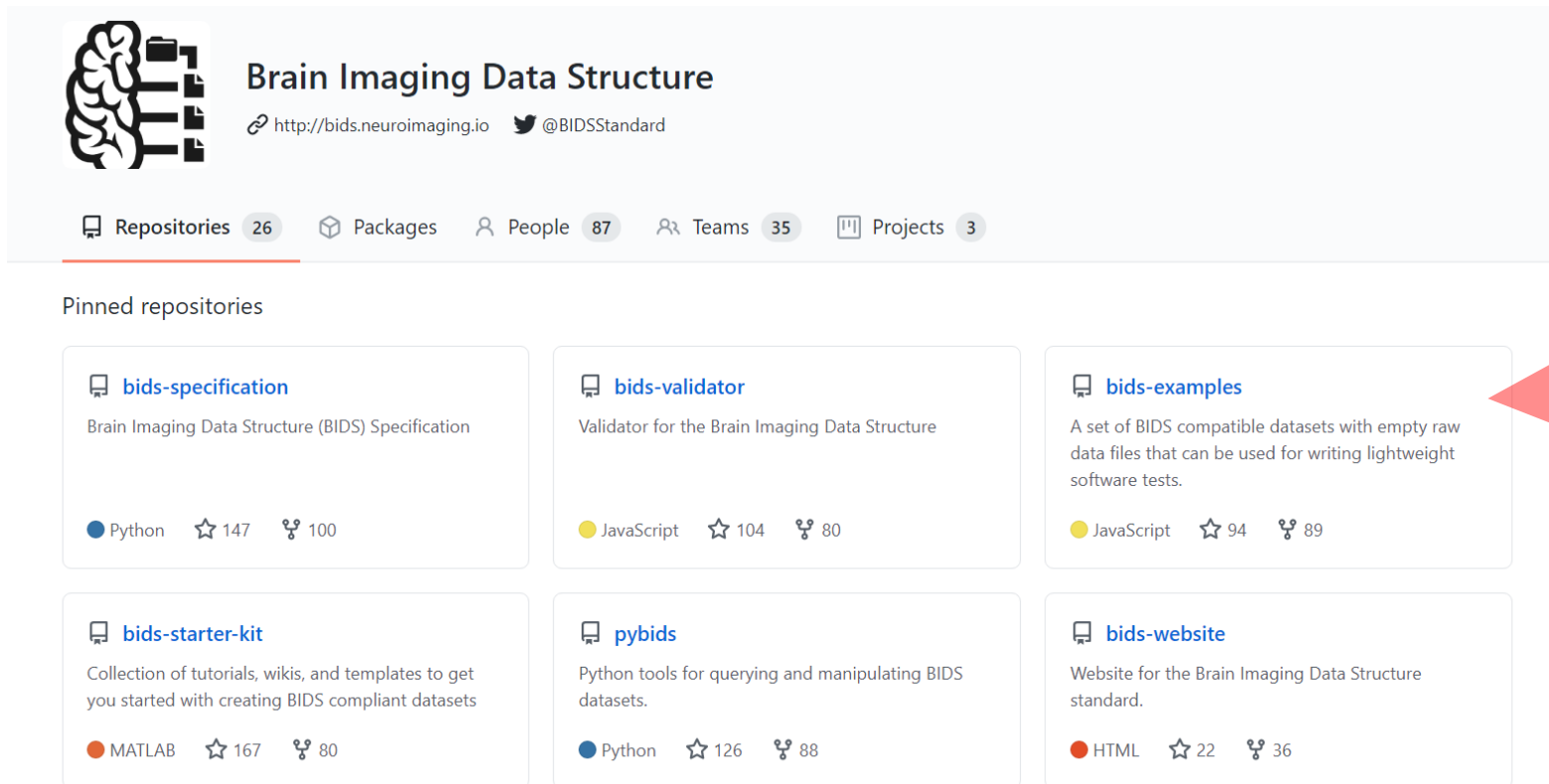
What is BIDS?


- It's a data **structure** ; nothing to do with **format** per se
- It's about:
 - how you organize data in a folder
 - how you name files
 - how you document metadata
 - using community standards and dictionaries to do all the above
- It cares about imaging data but also behaviour/cognition

BIDS is a widely supported “best practice” (becoming *a posteriori*, the “standard”, rather than been created *de novo*)



BIDS is a widely supported “best practice”



 **Brain Imaging Data Structure**
🔗 <http://bids.neuroimaging.io> 🐦 @BIDSStandard

📁 Repositories 26 📦 Packages 👤 People 87 👥 Teams 35 📁 Projects 3

Pinned repositories

- bids-specification**
Brain Imaging Data Structure (BIDS) Specification
Python ☆ 147 🍴 100
- bids-validator**
Validator for the Brain Imaging Data Structure
JavaScript ☆ 104 🍴 80
- bids-examples**
A set of BIDS compatible datasets with empty raw data files that can be used for writing lightweight software tests.
JavaScript ☆ 94 🍴 89
- bids-starter-kit**
Collection of tutorials, wikis, and templates to get you started with creating BIDS compliant datasets
MATLAB ☆ 167 🍴 80
- pybids**
Python tools for querying and manipulating BIDS datasets.
Python ☆ 126 🍴 88
- bids-website**
Website for the Brain Imaging Data Structure standard.
HTML ☆ 22 🍴 36

Everyone is welcome to contribute – examples, tests, documentation, code

<https://github.com/bids-standard>

CREDITS

SCIENTIFIC DATA

OPEN

SUBJECT CATEGORIES

- » Data publication and archiving
- » Research data

The brain imaging data structure, a format for organizing and describing outputs of neuroimaging experiments

Krzysztof J. Gorgolewski¹, Tibor Auer², Vince D. Calhoun^{3,4}, R. Cameron Craddock^{5,6}, Samir Das⁷, Eugene P. Duff⁸, Guillaume Flandin⁹, Satrajit S. Ghosh^{10,11}, Tristan Glatard^{7,12}, Yaroslav O. Halchenko¹³, Daniel A. Handwerker¹⁴, Michael Hanke^{15,16}, David Keator¹⁷, Xiangrui Li¹⁸, Zachary Michael¹⁹, Camille Maumet²⁰, B. Nolan Nichols^{21,22}, Thomas E. Nichols^{20,23}, John Pellman⁶, Jean-Baptiste Poline²⁴, Ariel Rokem²⁵, Gunnar Schaefer^{1,26}, Vanessa Sochat²⁷, William Triplett¹, Jessica A. Turner^{3,28}, Gaël Varoquaux²⁹ & Russell A. Poldrack¹

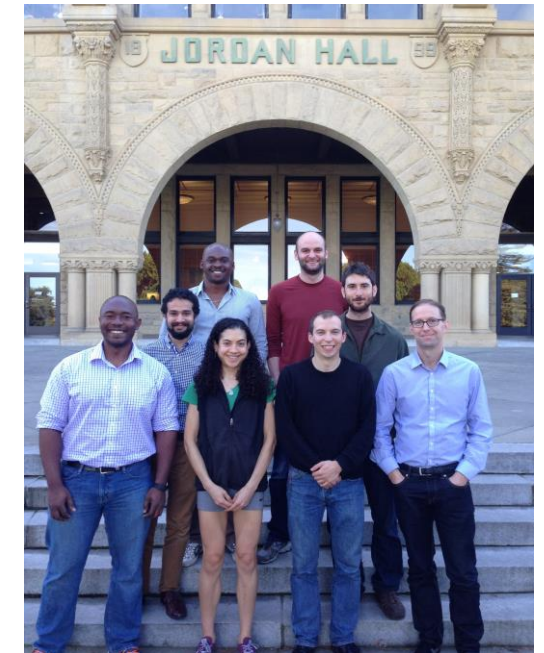
Received: 18 December 2015

Accepted: 19 May 2016

Published: 21 June 2016



Data Sharing Task Force



The Poldrack Lab @ Stanford

Evolution of BIDS

1. Kickoff meeting at Stanford in Spring 2015
2. Meeting at OHBM 2015 (June)
3. Introduced to neuroinformatics community at INCF Congress 2015 (August)
4. First release candidate and public call for comments (September)
5. Version 1.0.0 published along the introductory paper

→ Initially covered structural MRI and fMRI, now all sort of MRI, PET, EEG, MEG, iEEG, extensions for animal, connectivity, imaging genomics ..

**Brain Imaging Data Structure
v1.6.0**The BIDS Specification ▼[Introduction](#)

Common principles

Modality agnostic files

Modality specific files >Derivatives >Longitudinal and multi-site
studies

BIDS Extension Proposals

Appendix >

Changelog

The BIDS Starter Kit >**Datatype specific publications****EEG**

- Pernet, C. R., Appelhoff, S., Gorgolewski, K.J., Flandin, G., Phillips, C., Delorme, A., Oostenveld, R. (2019). **EEG-BIDS, an extension to the brain imaging data structure for electroencephalography**. Scientific data, 6 (103). [doi:10.1038/s41597-019-0104-8](https://doi.org/10.1038/s41597-019-0104-8)

iEEG

- Holdgraf, C., Appelhoff, S., Bickel, S., Bouchard, K., D'Ambrosio, S., David, O., Devinsky, O., Dichter, B., Flinker, A., Foster, B. L., Gorgolewski, K. J., Groen, I., Groppe, D., Gunduz, A., Hamilton, L., Honey, C. J., Jas, M., Knight, R., Lauchaux, J.-P., Lau, J. C., Lee-Messer, C., Lundstrom, B. N., Miller, K. J., Ojemann, J. G., Oostenveld, R., Petridou, N., Piantoni, G., Pigorini, A., Pouratian, N., Ramsey, N. F., Stolk, A., Swann, N. C., Tadel, F., Voytek, B., Wandell, B. A., Winawer, J., Whitaker, K., Zehl, L., Hermes, D. (2019). **iEEG-BIDS, extending the Brain Imaging Data Structure specification to human intracranial electrophysiology**. Scientific data, 6 (102). [doi:10.1038/s41597-019-0105-7](https://doi.org/10.1038/s41597-019-0105-7)

MEG

- Niso Galan, J.G., Gorgolewski, K.J., Bock, E., Brooks, T.L., Flandin, G., Gramfort, A., Henson, R.N., Jas, M., Litvak, V., Moreau, J., Oostenveld, R., Schoffelen, J.-M., Tadel, F., Wexler, J., Baillet, S. (2018). **MEG-BIDS, the brain imaging data structure extended to magnetoencephalography**. Scientific Data, 5 (180110). [doi:10.1038/sdata.2018.110](https://doi.org/10.1038/sdata.2018.110)

Table of contents

Motivation

Extensions

Citing BIDS

[Original publication](#)

Datatype specific publications

EEG

iEEG

MEG

PET

Genetics

Research Resource Identifier
(RRID)

The BIDS goal is to make
more data accessible to more
researchers

Making more data accessible

- for yourself in 6 months time

- to people in the lab

- (new students, collaborators, governance)

- to other researchers

- (data sharing)

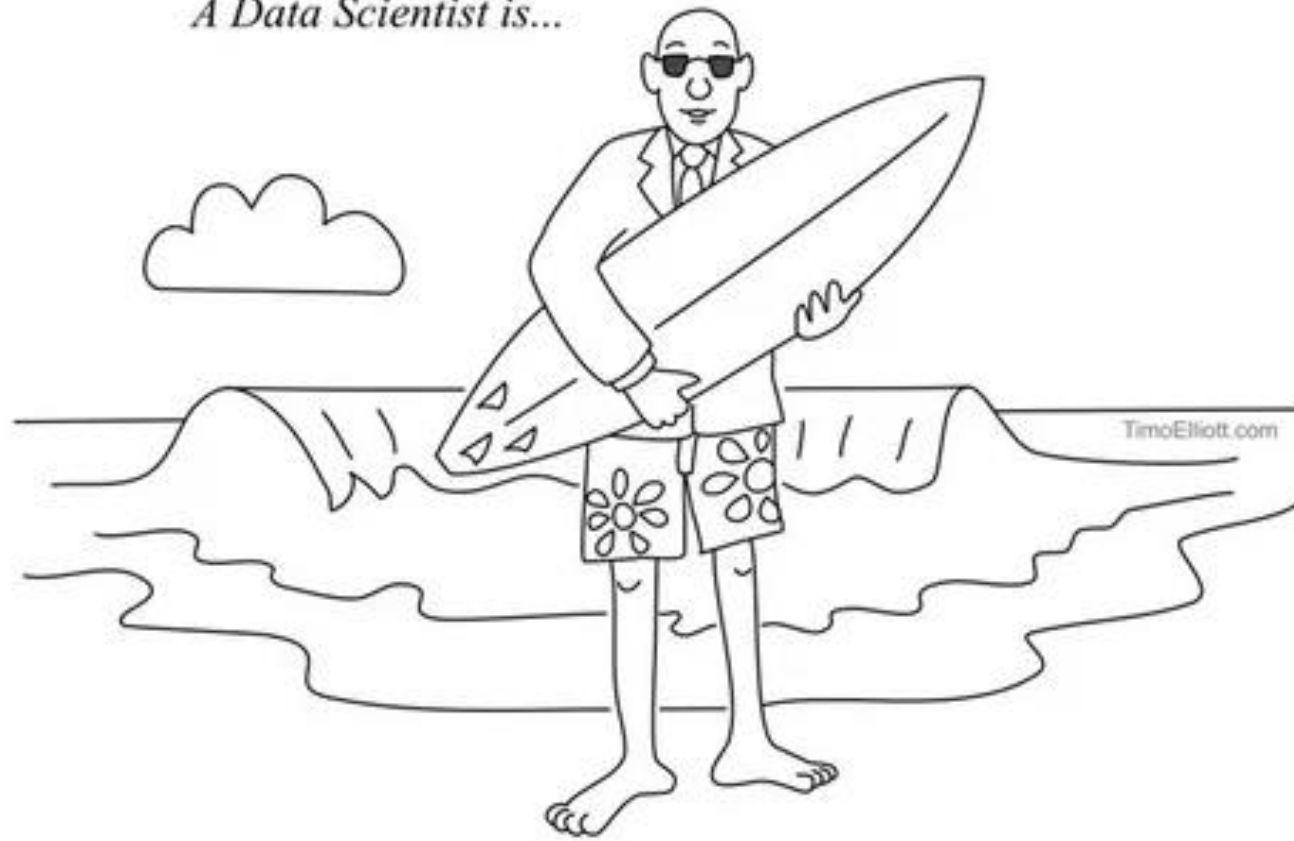
Meet Prof. Smith



I need to ask Mike about these 'old' data, there is so much more we can do with this

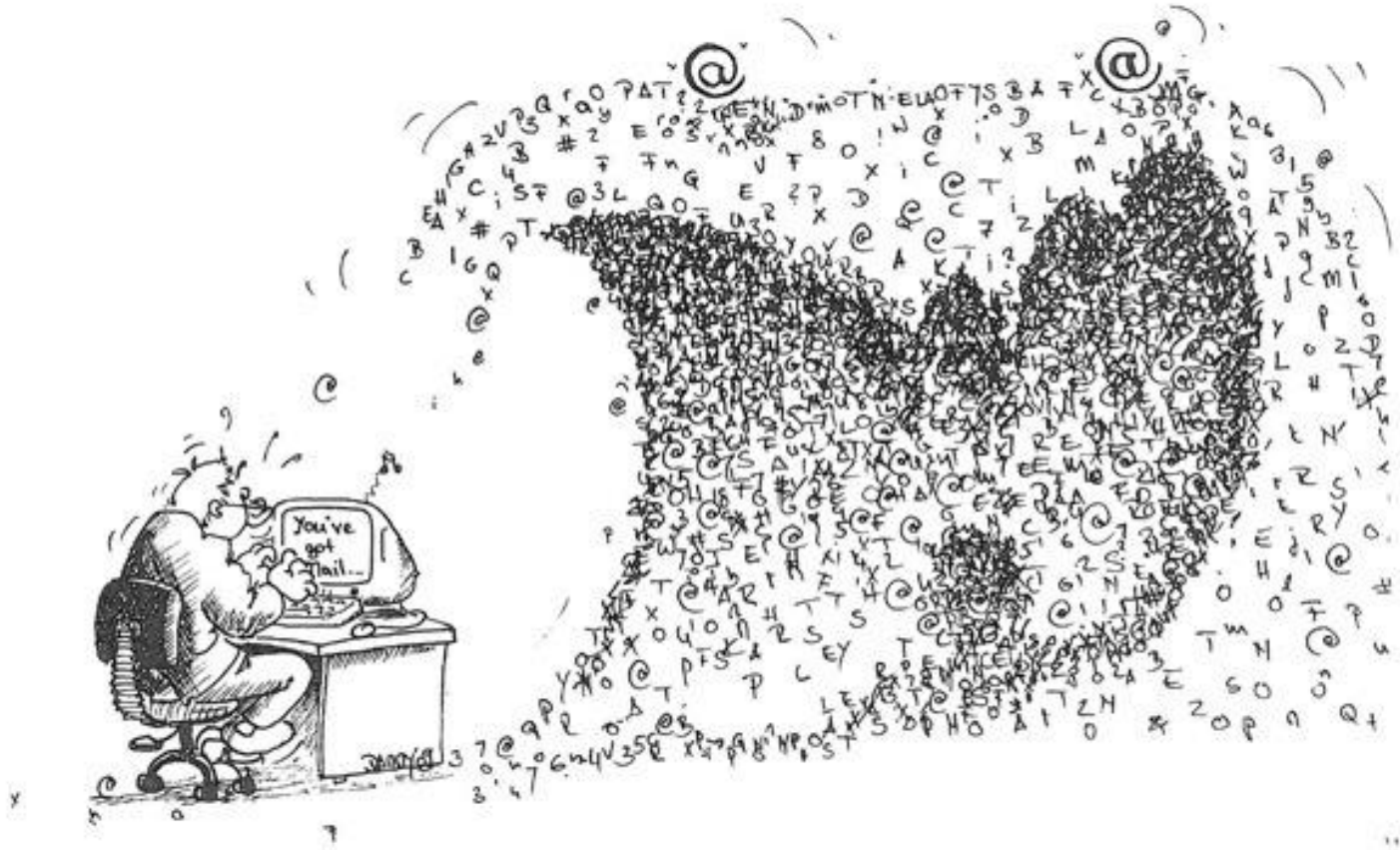
Meet Mike

A Data Scientist is...

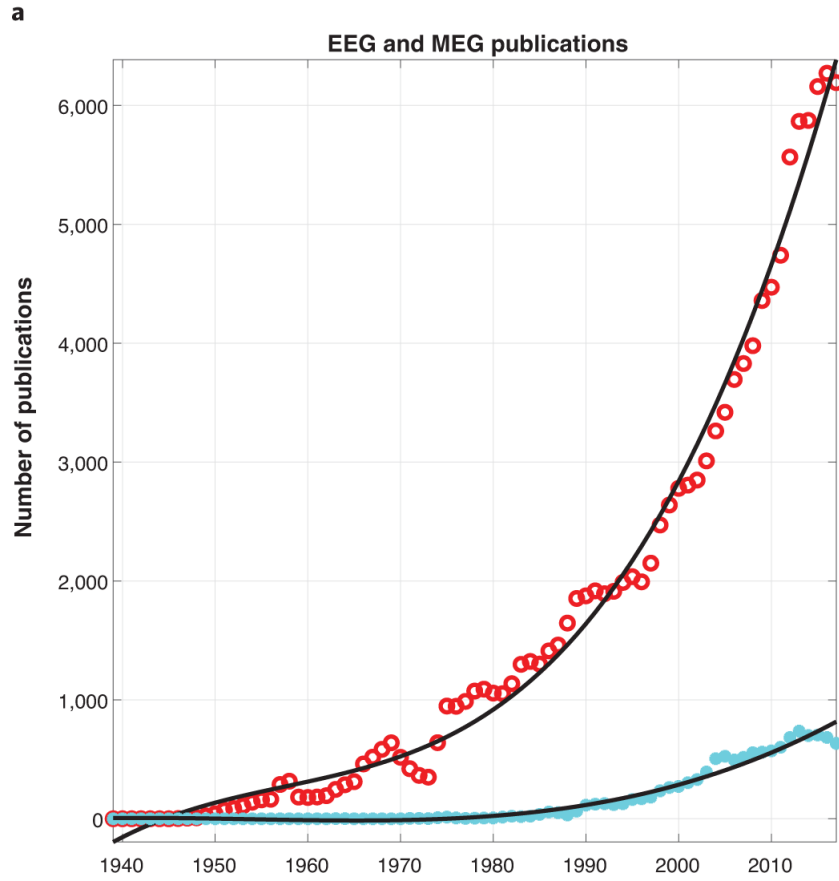


A Business Analyst that lives in California.

Prof Smith is lost in her data

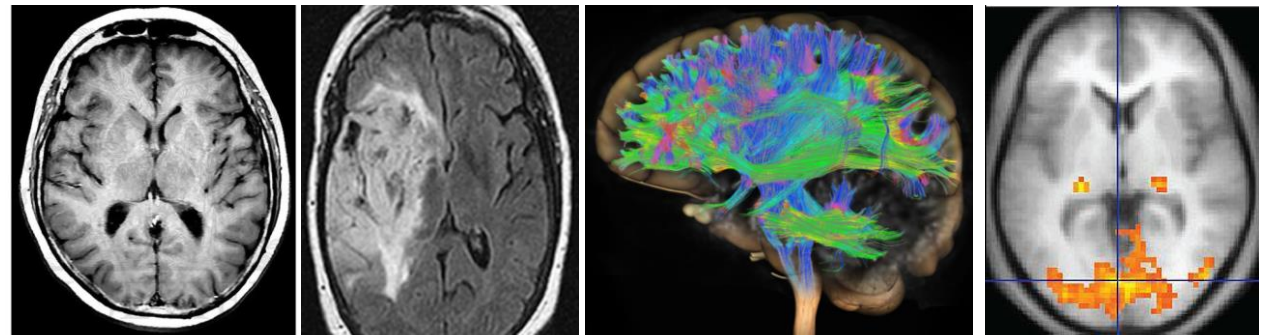


Getting lost in your data



[COBIDAS MEEG – figure 1](#)

- **Multitude of techniques** (MEG, EEG, PET, MRI, NIRS, TMS, etc ...) and applications.
- Despite similarities in experimental designs and data types **each researcher tends to organize and describe their data in their own way.**



BIDS principles

Principles

1. Adoption is crucial

= got to fit peoples' needs = driven by user cases

2. Don't reinvent the wheel

= use already in use file formats = minimize work for users

3. 80/20 rule

= 80% of the work is already done by you collecting data, just need 20% to get it to BIDS

BIDS data structure basics

A BIDS folder (any/all modality)

Name	Date modified	Type
stimuli	21/03/2018 21:58	File folder
sub-002	24/03/2018 08:56	File folder
sub-003	24/03/2018 08:56	File folder
sub-004	24/03/2018 08:56	File folder
sub-005	24/03/2018 08:56	File folder
sub-006	24/03/2018 08:56	File folder
sub-007	24/03/2018 08:56	File folder
sub-008	24/03/2018 08:56	File folder
sub-009	24/03/2018 08:56	File folder
sub-010	24/03/2018 08:56	File folder
sub-011	24/03/2018 08:56	File folder
sub-012	24/03/2018 08:56	File folder
sub-013	24/03/2018 08:56	File folder
sub-014	24/03/2018 08:56	File folder
sub-015	24/03/2018 08:56	File folder
sub-016	24/03/2018 08:56	File folder
sub-017	24/03/2018 08:56	File folder
sub-018	24/03/2018 08:56	File folder
sub-019	24/03/2018 08:56	File folder
dataset_description.json	15/03/2018 11:30	JSON File
participants.tsv	19/03/2018 20:21	TSV File
README.txt	15/03/2018 11:33	TXT File

- **source** (optional)
- **stimuli** (optional)
- **derivatives** (optional)
- **sub-XXX**

Anyone can now find his/her way around data !

Metadata as text files (tsv, json) with standard dictionary

Name	Date modified	Type
stimuli	21/03/2018 21:58	File folder
sub-002	24/03/2018 08:56	File folder
sub-003	24/03/2018 08:56	File folder
sub-004	24/03/2018 08:56	File folder
sub-005	24/03/2018 08:56	File folder
sub-006	24/03/2018 08:56	File folder
sub-007	24/03/2018 08:56	File folder
sub-008	24/03/2018 08:56	File folder
sub-009	24/03/2018 08:56	File folder
sub-010	24/03/2018 08:56	File folder
sub-011	24/03/2018 08:56	File folder
sub-012	24/03/2018 08:56	File folder
sub-013	24/03/2018 08:56	File folder
sub-014	24/03/2018 08:56	File folder
sub-015	24/03/2018 08:56	File folder
sub-016	24/03/2018 08:56	File folder
sub-017	24/03/2018 08:56	File folder
sub-018	24/03/2018 08:56	File folder
sub-019	24/03/2018 08:56	File folder
dataset_description.json	15/03/2018 11:30	JSON File
participants.tsv	19/03/2018 20:21	TSV File
README.txt	15/03/2018 11:33	TXT File

```
{  
  "Name": "",  
  "BIDSVersion": "",  
  "License": "",  
  "Authors": "",  
  "Acknowledgements": "",  
  "HowToAcknowledge": "",  
  "Funding": "",  
  "ReferencesAndLinks": "",  
  "SourceDatasetsURLs": ""  
}
```

Your data are identifiable and citable

Metadata as text files (tsv, json) with standard dictionary

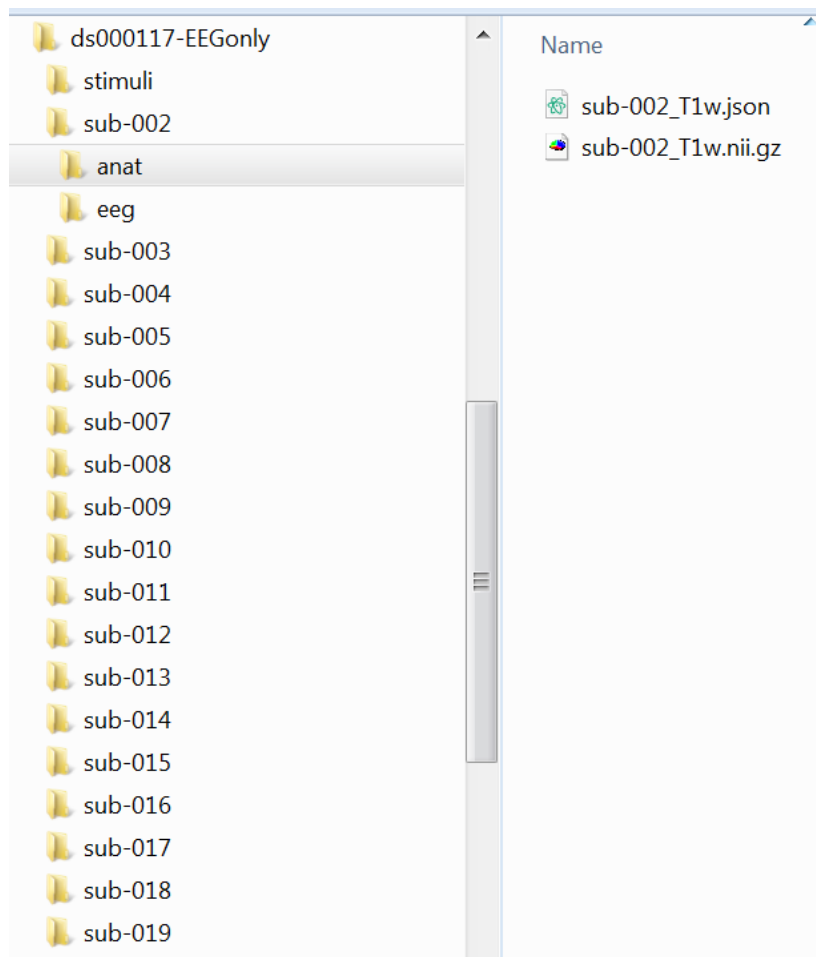
Name	Date modified	Type
stimuli	21/03/2018 21:58	File folder
sub-002	24/03/2018 08:56	File folder
sub-003	24/03/2018 08:56	File folder
sub-004	24/03/2018 08:56	File folder
sub-005	24/03/2018 08:56	File folder
sub-006	24/03/2018 08:56	File folder
sub-007	24/03/2018 08:56	File folder
sub-008	24/03/2018 08:56	File folder
sub-009	24/03/2018 08:56	File folder
sub-010	24/03/2018 08:56	File folder
sub-011	24/03/2018 08:56	File folder
sub-012	24/03/2018 08:56	File folder
sub-013	24/03/2018 08:56	File folder
sub-014	24/03/2018 08:56	File folder
sub-015	24/03/2018 08:56	File folder
sub-016	24/03/2018 08:56	File folder
sub-017	24/03/2018 08:56	File folder
sub-018	24/03/2018 08:56	File folder
sub-019	24/03/2018 08:56	File folder
dataset_description.json	15/03/2018 11:30	JSON File
participants.tsv	19/03/2018 20:21	TSV File
README.txt	15/03/2018 11:33	TXT File

```
participant_id age sex
sub-002        34  M
sub-003        12  F
sub-004        33  F
```

Subjects info are shared at the root – easy to figure populations, age, and other basic demographics

Human and machine readable!

A BIDS folder (any/all modality)



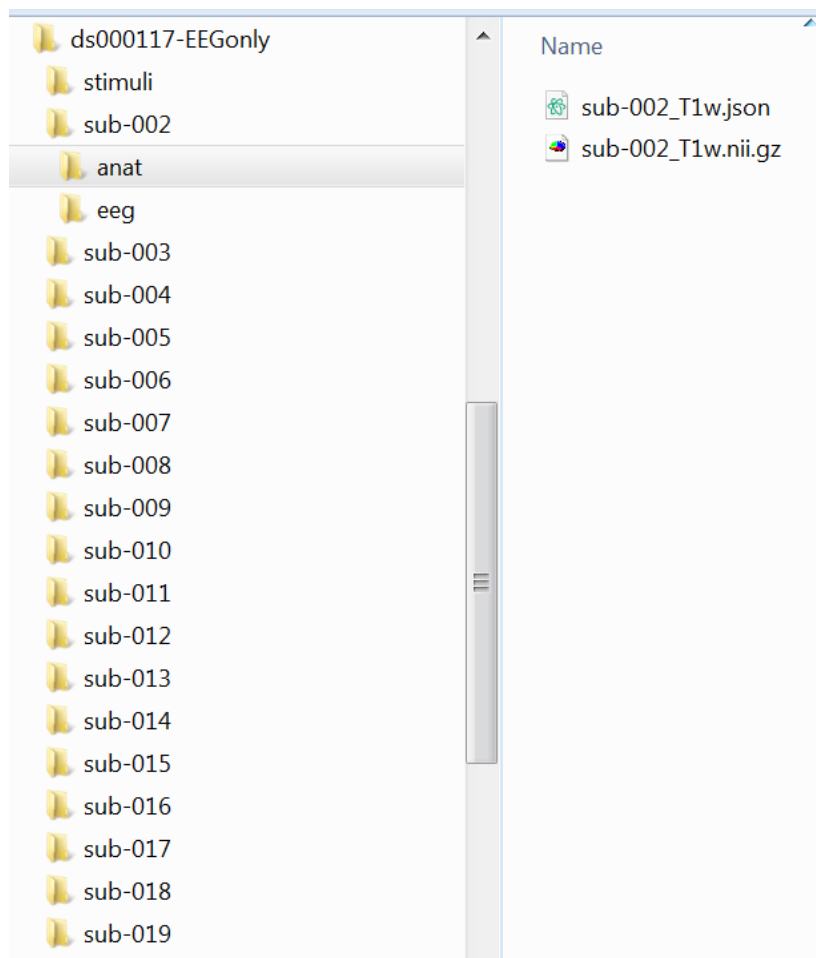
Name redundancy – harder to make mistakes ; files comes with metadata (json)

Inside folder sub-002

→ anat folder
sub-002_T1w.nii.gz

→ eeg folder
????

A BIDS folder (any/all modality)



Name redundancy – harder to make mistakes ; files comes with metadata (json)

Inside folder sub-002

→ anat folder

sub-002_T1w.nii.gz

→ eeg folder

sub-002_something_eeg.set

BIDS for EEG

www.nature.com/scientificdata

SCIENTIFIC DATA

OPEN
COMMENT

EEG-BIDS, an extension to the brain imaging data structure for electroencephalography

Received: 16 January 2019

Accepted: 7 May 2019

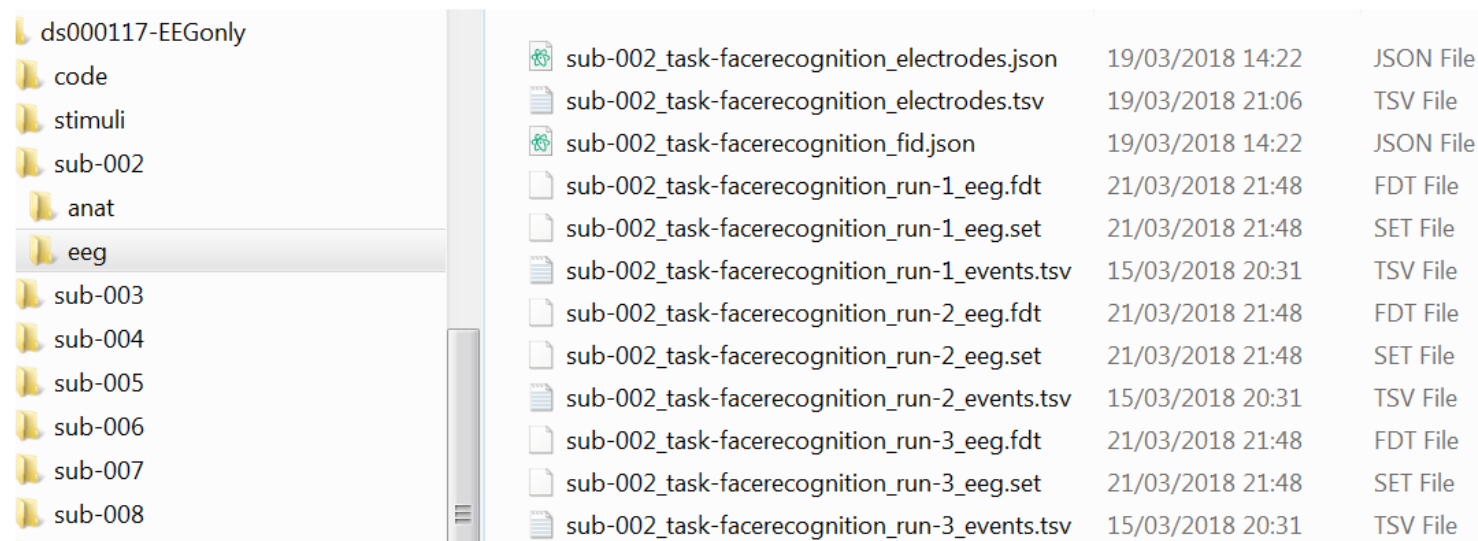
Published online: 25 June 2019

Cyril R. Pernet¹, Stefan Appelhoff², Krzysztof J. Gorgolewski³, Guillaume Flandin⁴,
Christophe Phillips⁵, Arnaud Delorme^{6,7} & Robert Oostenveld^{8,9}

The Brain Imaging Data Structure (BIDS) project is a rapidly evolving effort in the human brain imaging research community to create standards allowing researchers to readily organize and share study data within and between laboratories. Here we present an extension to BIDS for electroencephalography (EEG) data, EEG-BIDS, along with tools and references to a series of public EEG datasets organized using this new standard.

EEG File formats (known and supported)

Name	Date modified	Type
stimuli	21/03/2018 21:58	File folder
sub-002	24/03/2018 08:56	File folder
sub-003	24/03/2018 08:56	File folder
sub-004	24/03/2018 08:56	File folder
sub-005	24/03/2018 08:56	File folder
sub-006	24/03/2018 08:56	File folder
sub-007	24/03/2018 08:56	File folder
sub-008	24/03/2018 08:56	File folder
sub-009	24/03/2018 08:56	File folder
sub-010	24/03/2018 08:56	File folder
sub-011	24/03/2018 08:56	File folder
sub-012	24/03/2018 08:56	File folder
sub-013	24/03/2018 08:56	File folder
sub-014	24/03/2018 08:56	File folder
sub-015	24/03/2018 08:56	File folder
sub-016	24/03/2018 08:56	File folder
sub-017	24/03/2018 08:56	File folder
sub-018	24/03/2018 08:56	File folder
sub-019	24/03/2018 08:56	File folder
dataset_description.json	15/03/2018 11:30	JSON File
participants.tsv	19/03/2018 20:21	TSV File
README.txt	15/03/2018 11:33	TXT File
task-facerecognition_channels.tsv	19/03/2018 20:54	TSV File
task-facerecognition_eeg.json	19/03/2018 20:42	JSON File



ds000117-EEGonly		
code		
stimuli		
sub-002		
anat		
eeg		
sub-003		
sub-004		
sub-005		
sub-006		
sub-007		
sub-008		
sub-002_task-facerecognition_electrodes.json	19/03/2018 14:22	JSON File
sub-002_task-facerecognition_electrodes.tsv	19/03/2018 21:06	TSV File
sub-002_task-facerecognition_fid.json	19/03/2018 14:22	JSON File
sub-002_task-facerecognition_run-1_eeg.fdt	21/03/2018 21:48	FDT File
sub-002_task-facerecognition_run-1_eeg.set	21/03/2018 21:48	SET File
sub-002_task-facerecognition_run-1_events.tsv	15/03/2018 20:31	TSV File
sub-002_task-facerecognition_run-2_eeg.fdt	21/03/2018 21:48	FDT File
sub-002_task-facerecognition_run-2_eeg.set	21/03/2018 21:48	SET File
sub-002_task-facerecognition_run-2_events.tsv	15/03/2018 20:31	TSV File
sub-002_task-facerecognition_run-3_eeg.fdt	21/03/2018 21:48	FDT File
sub-002_task-facerecognition_run-3_eeg.set	21/03/2018 21:48	SET File
sub-002_task-facerecognition_run-3_events.tsv	15/03/2018 20:31	TSV File

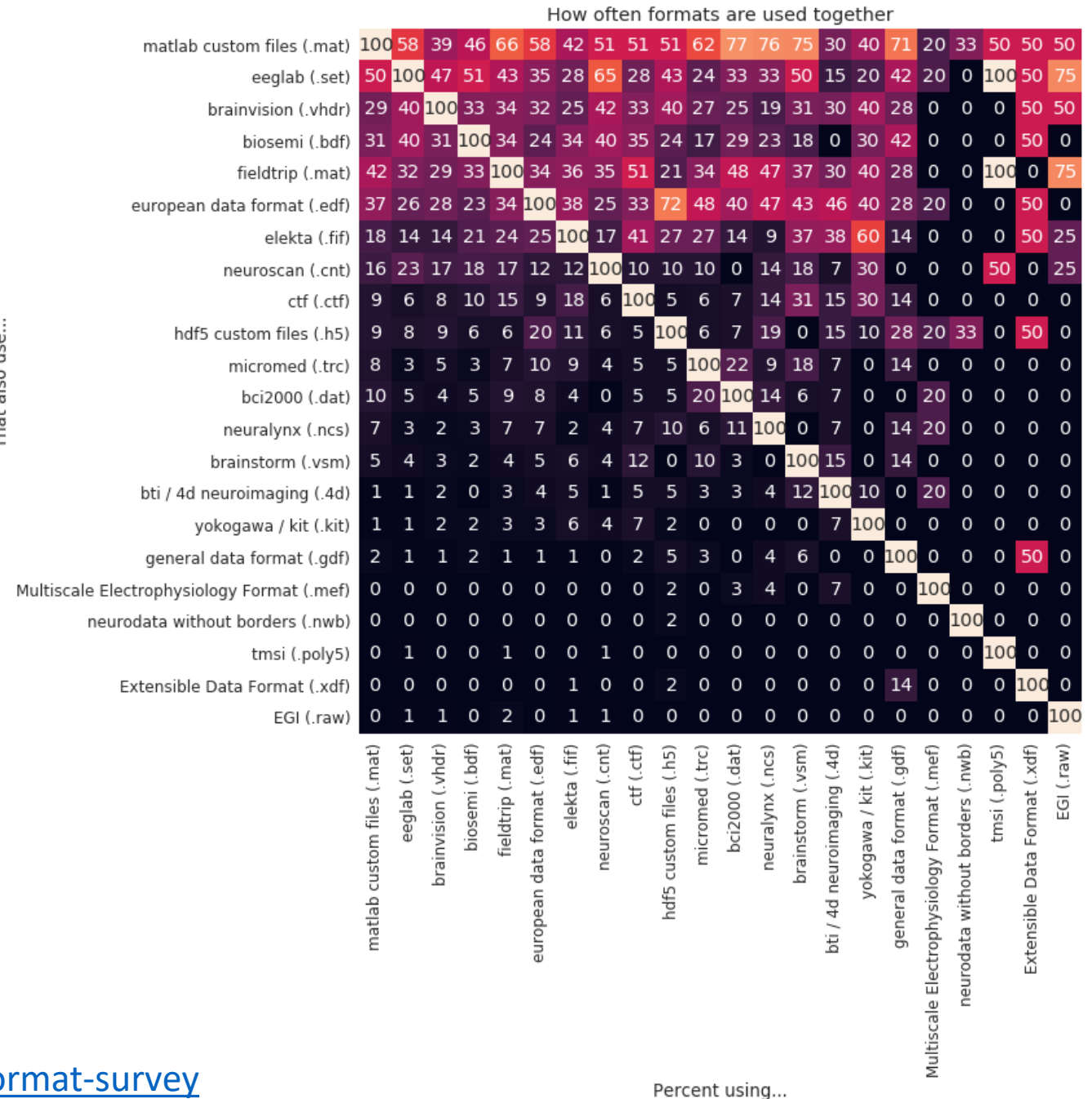
Anyone can read the data

- **official: edf & vhdr/eeg**
 - **unofficial: set/fdt, bdf**
- (all supported by open-source software)**

(i) EEG File formats

- (i) wide usage in the community
- (ii) open access documentation, open source implementation for both reading and writing in at least two programming languages and widely supported in multiple software packages (both open source and commercial)
- (iii) high numerical precision (16 and 32 bits respectively).

That also use...



Some (M/iE/E)EG specifics metadata

Name	task-facerecognition_channels.tsv	Type
		File folder
1	name unit type description	File folder
		File folder
2	EEG001 uV EEG	File folder
		File folder
3	EEG002 uV EEG	File folder
		File folder
4	EEG003 uV EEG	File folder
		File folder
5	EEG004 uV EEG	File folder
		File folder
6	EEG005 uV EEG	File folder
		File folder
7	EEG006 uV EEG	File folder
		File folder
8	EEG007 uV EEG	File folder
		File folder
9	EEG008 uV EEG	File folder
		File folder
10	EEG009 uV EEG	File folder
		File folder
sub-017	24/03/2018 08:56	File folder
sub-018	24/03/2018 08:56	File folder
sub-019	24/03/2018 08:56	File folder
dataset_description.json	15/03/2018 11:30	JSON File
participants.tsv	19/03/2018 20:21	TSV File
README.txt	15/03/2018 11:33	TXT File
task-facerecognition_channels.tsv	19/03/2018 20:54	TSV File
task-facerecognition_eeg.json	19/03/2018 20:42	JSON File

ds000117-EEGonly			
code			
stimuli			
sub-002			
anat			
eeg			
sub-003			
sub-004			
sub-005			
sub-006			
sub-007			
sub-008			
sub-002_task-facerecognition_electrodes.json	19/03/2018 14:22		JSON File
sub-002_task-facerecognition_electrodes.tsv	19/03/2018 21:06		TSV File
sub-002_task-facerecognition_fid.json	19/03/2018 14:22		JSON File
sub-002_task-facerecognition_run-1_eeg.fdt	21/03/2018 21:48		FDT File
sub-002_task-facerecognition_run-1_eeg.set	21/03/2018 21:48		SET File
sub-002_task-facerecognition_run-1_events.tsv	15/03/2018 20:31		TSV File
sub-002_task-facerecognition_run-2_eeg.fdt	21/03/2018 21:48		FDT File
sub-002_task-facerecognition_run-2_eeg.set	21/03/2018 21:48		SET File
sub-002_task-facerecognition_run-2_events.tsv	15/03/2018 20:31		TSV File
sub-002_task-facerecognition_run-3_eeg.fdt	21/03/2018 21:48		FDT File
sub-002_task-facerecognition_run-3_eeg.set	21/03/2018 21:48		SET File
sub-002_task-facerecognition_run-3_events.tsv	15/03/2018 20:31		TSV File

Some (M/iE/E)EG specifics metadata

The image shows a file explorer window with a list of files and folders. A red circle highlights the file `sub-002_task-facerecognition_electrodes.json`. Below the file list, a code editor displays the contents of `sub-002_task-facerecognition_electrodes.tsv` and `sub-002_task-facerecognition_fid.json`.

File Explorer List:

Name	Type	ds000117-EEGonly
task-facerecognition_channels.tsv	File folder	
sub-001	File folder	
sub-002	File folder	
sub-003	File folder	
sub-004	File folder	
sub-005	File folder	
sub-006	File folder	
sub-007	File folder	
sub-008	File folder	
sub-009	File folder	
sub-010	File folder	
sub-017	File folder	
sub-018	File folder	
sub-019	File folder	
dataset_description.json	JSON File	
participants.tsv	TSV File	19/03/2018 20:21
README.txt	TXT File	15/03/2018 11:33
task-facerecognition_channels.tsv	TSV File	19/03/2018 20:54
task-facerecognition_eeg.json	JSON File	19/03/2018 20:42
code	File folder	
sub-002_task-facerecognition_electrodes.json	JSON File	19/03/2018 14:22
sub-002_task-facerecognition_electrodes.tsv	TSV File	19/03/2018 21:06
sub-002_task-facerecognition_fid.json	JSON File	19/03/2018 14:22
sub-002_task-facerecognition_run-1_eeg.fdt	FDT File	21/03/2018 21:48
sub-002_task-facerecognition_run-1_eeg.set	SET File	21/03/2018 21:48
sub-002_task-facerecognition_run-1_events.tsv	TSV File	15/03/2018 20:31
sub-002_task-facerecognition_run-2_eeg.fdt	FDT File	21/03/2018 21:48

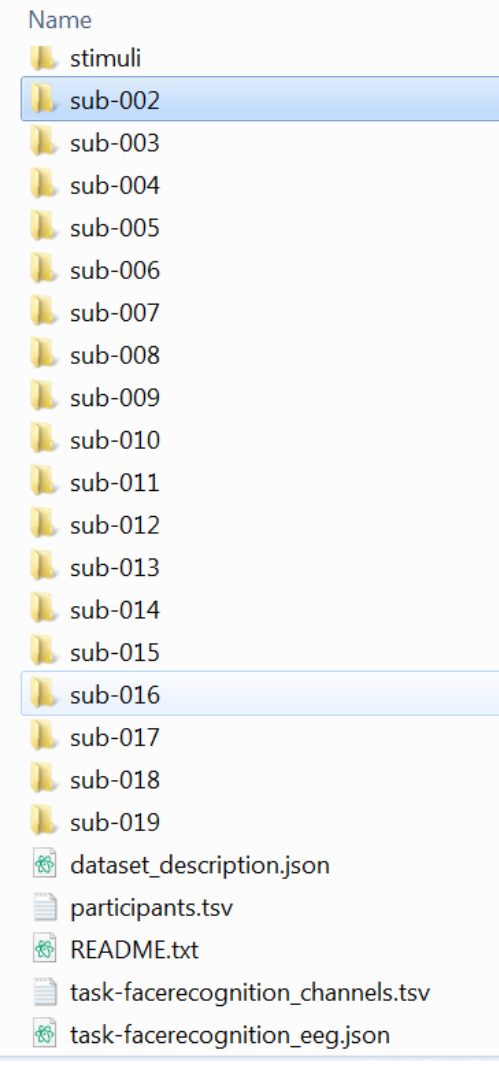
sub-002_task-facerecognition_electrodes.tsv:

1	name	unit	type	description
2	EEG001	uV	EEG	
3	EEG002	uV	EEG	
4	EEG003	uV	EEG	
5	EEG004	uV	EEG	
6	EEG005	uV	EEG	
7	EEG006	uV	EEG	
8	EEG007	uV	EEG	
9	EEG008	uV	EEG	
10	EEG009	uV	EEG	

sub-002_task-facerecognition_fid.json:

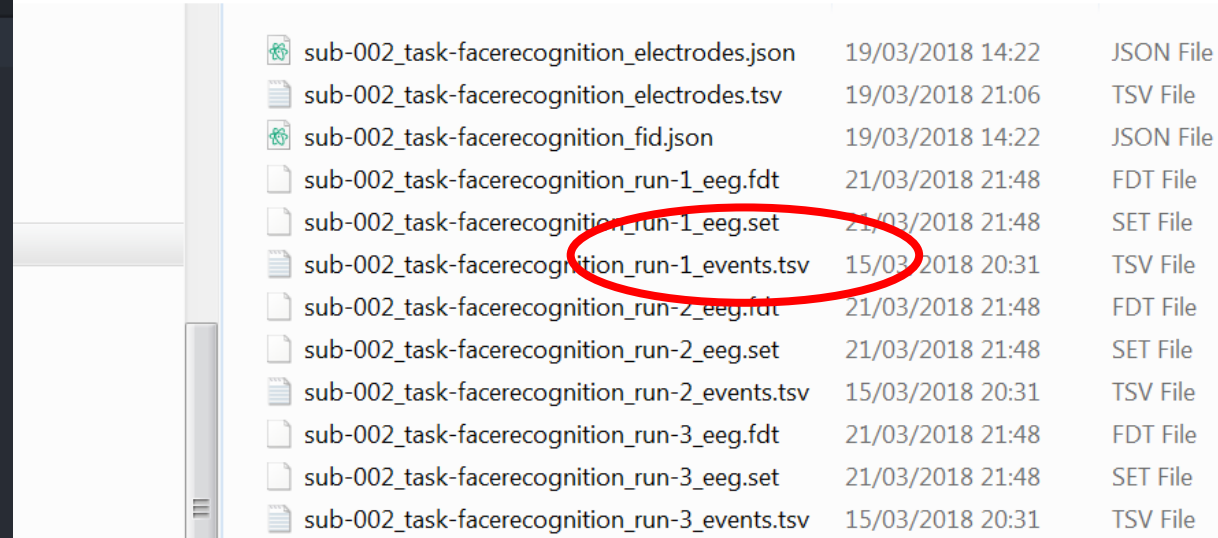
```
{
  "EEGCoordinateSystem": "T1w",
  "EEGCoordinateUnits": "mm",
  "AnatomicalMRICoordinateSystem": "T1w",
  "AnatomicalMRICoordinateUnits": "mm",
  "LandmarkCoordinates": "{\"LPA\" : [-0.070999 -2.6537e-08 -",
  "LandmarkCoordinateSystem": "T1w",
  "LandmarkCoordinateUnits": "mm"
}
```

Some (M/iE/E)EG specifics metadata



sub-002_task-facerecognition_run-1_events.tsv

	1	onset	trial_type	eventcode	
	2	26624	unfamiliar_new	13	
	3	27667	response	0	
	4	29968	unfamiliar_second_early	14	
	5	30680	response	0	
	6	33386	unfamiliar_new	13	
	7	36694	unfamiliar_new	13	
	8	40205	famous_new	5	
	9	41041	response	0	
	10	43530	unfamiliar_new	13	
	11	47076	famous_new	5	
	12	47897	response	0	
	13	50641	scrambled_new	17	
	14	54041	unfamiliar_second_late	15	
	15	57624	famous_new	5	
	16	58404	response	0	
	17	61097	unfamiliar_second_late	15	
	18	64680	unfamiliar_new	13	
	19	65488	response	0	
	20	68098	unfamiliar_second_early	14	



File Name	Date	Time	File Type
sub-002_task-facerecognition_electrodes.json	19/03/2018	14:22	JSON File
sub-002_task-facerecognition_electrodes.tsv	19/03/2018	21:06	TSV File
sub-002_task-facerecognition_fid.json	19/03/2018	14:22	JSON File
sub-002_task-facerecognition_run-1_eeg.fdt	21/03/2018	21:48	FDT File
sub-002_task-facerecognition_run-1_eeg.set	21/03/2018	21:48	SET File
sub-002_task-facerecognition_run-1_events.tsv	15/03/2018	20:31	TSV File
sub-002_task-facerecognition_run-2_eeg.fdt	21/03/2018	21:48	FDT File
sub-002_task-facerecognition_run-2_eeg.set	21/03/2018	21:48	SET File
sub-002_task-facerecognition_run-2_events.tsv	15/03/2018	20:31	TSV File
sub-002_task-facerecognition_run-3_eeg.fdt	21/03/2018	21:48	FDT File
sub-002_task-facerecognition_run-3_eeg.set	21/03/2018	21:48	SET File
sub-002_task-facerecognition_run-3_events.tsv	15/03/2018	20:31	TSV File

Yes, this info is often present on a channel

- as triggers, no metadata/name
- also easier to figure out as user (i.e. yourself in 6 months) what those event codes are

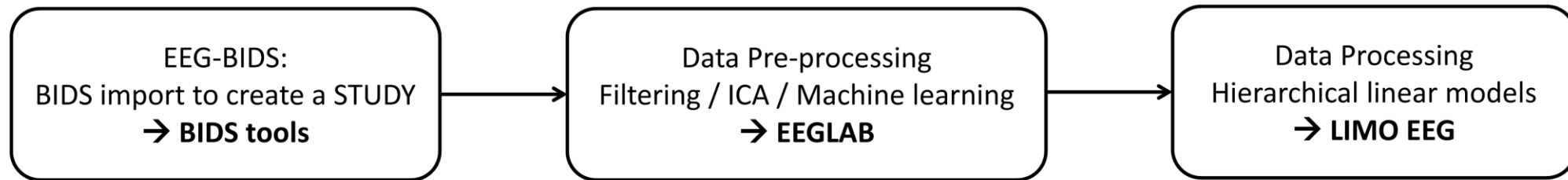
Prof. Smith (2030)



What other benefits?

Benefits

- Use each other data / well documented / ready to analyse
- You can have **pipelines!**



- Workflow: the sequence of computational steps through which a piece of work passes from initiation to completion.
- Pipeline: set of data processing elements connected in series, where the output of one element is the input of the next one – pipelines implement workflows.

EEGLAB-LIMO pipeline

TECHNOLOGY AND CODE ARTICLE

Front. Neurosci. | doi: 10.3389/fnins.2020.610388

From BIDS-formatted EEG data to sensor-space group results: a fully reproducible workflow with EEGLAB and LIMO EEG

Provisionally accepted



Cyril R. Pernet^{1*},



Ramón Martínez-Cancino², Dung Truong²,



Scott Makeig² and



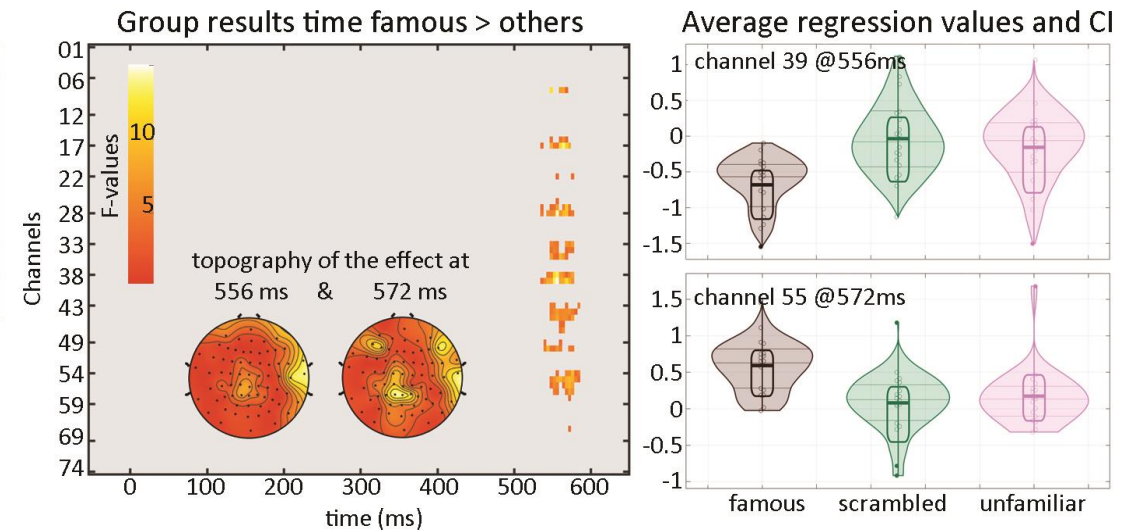
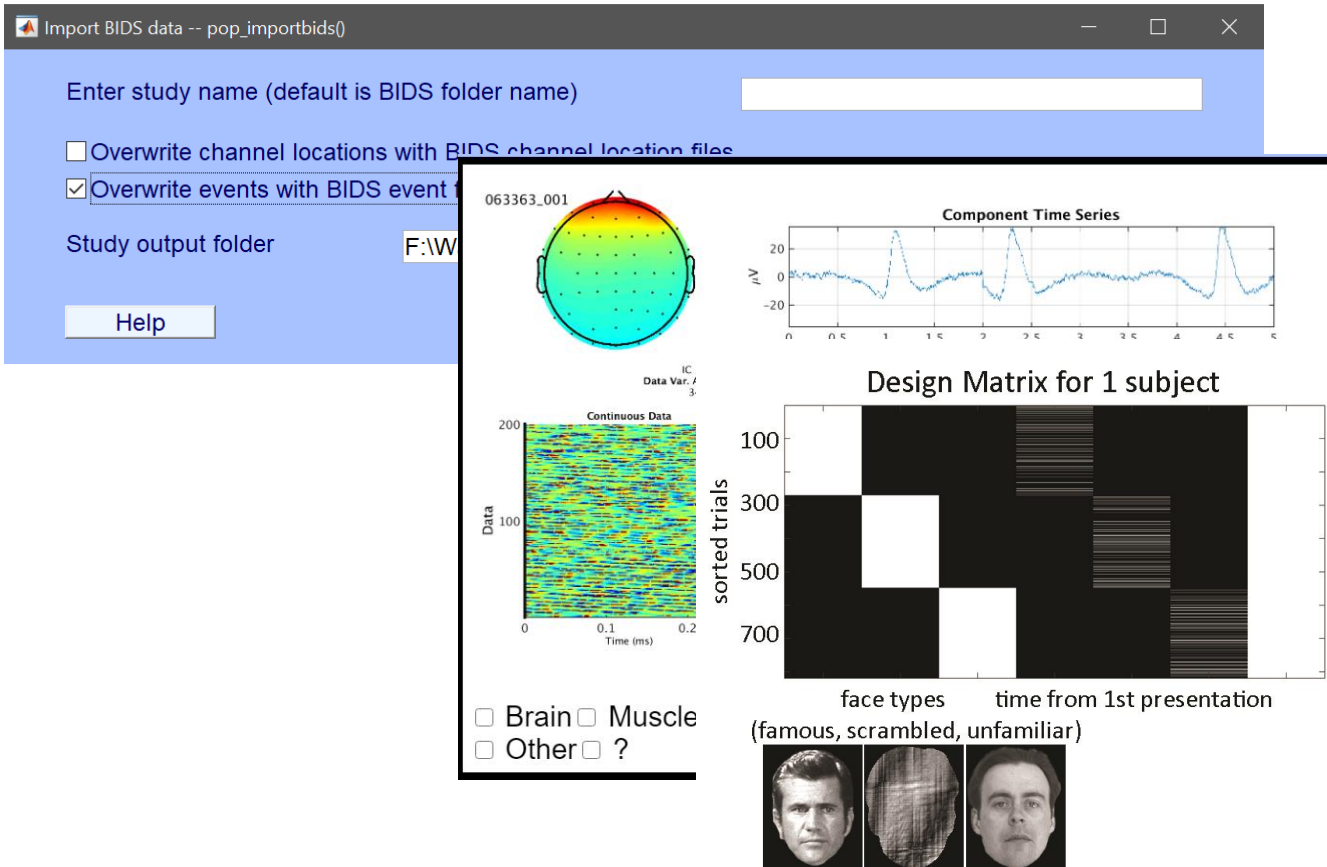
Arnaud Delorme²

EEGLAB-LIMO pipeline

Fully reproducible code from import BIDS to figures



Attend our session
this Thursday to
check this out



How do I start?

Preparing data using BIDS

GitHub, Inc. [US] | https://github.com/bids-standard/bids-examples/tree/master/eeg_ds000117/sub-01/...

Search or jump to... / Pull requests Issues Marketplace Explore

bids-standard / bids-examples

Watch 37 Star 53 Fork 54

Code Issues 2 Pull requests 1 Security Insights

Branch: master bids-examples / eeg_ds000117 / sub-01 / eeg / Create new file Upload files Find file History

sappelhoff EEG example fixes ... Latest commit 9252f7b on 21 Aug 2018

..		
sub-01_task-facerecognition_coordsystem.json	EEG example fixes	3 months ago
sub-01_task-facerecognition_electrodes.tsv	EEG example fixes	3 months ago
sub-01_task-facerecognition_run-1_eeg.fdt	EEG example fixes	3 months ago
sub-01_task-facerecognition_run-1_eeg.set	EEG example fixes	3 months ago
sub-01_task-facerecognition_run-1_events.tsv	EEG example fixes	3 months ago
sub-01_task-facerecognition_run-2_eeg.fdt	EEG example fixes	3 months ago
sub-01_task-facerecognition_run-2_eeg.set	EEG example fixes	3 months ago
sub-01_task-facerecognition_run-2_events.tsv	EEG example fixes	3 months ago

Preparing data using BIDS

← → ↻ 🏠 🔒 GitHub, Inc. [US] | https://github.com/bids-standard/bids-starter-kit 🔍 ☆ ABP 🛡️ 📧 🔥 🚀 📄 🗄️ 📄 📄 📄 📄 📄 📄 📄

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📁 bids-standard / **bids-starter-kit** 📺 Watch 23 ★ Star 62 🍴 Fork 34

🔗 Code 📄 Issues 18 🔗 Pull requests 4 📁 Projects 1 📄 Wiki 🛡️ Security 📊 Insights

Collection of tutorials, wikis, and templates to get you started with creating BIDS compliant datasets

📄 217 commits 🌿 6 branches 📦 3 releases 👤 18 contributors 📄 CC-BY-4.0

Branch: master ▼ New pull request 🔗

👤 KirstieJane	Add CC-BY license
📁 matlabCode	mil
📁 pythonCode	Me
📁 reports	Up
📁 templates	mil
📁 wiki-archives	add archive of wiki to repo

Welcome to the BIDS Starter Kit

📁 📁 📁 📁 📁 📁 📁 📁 📁 📁

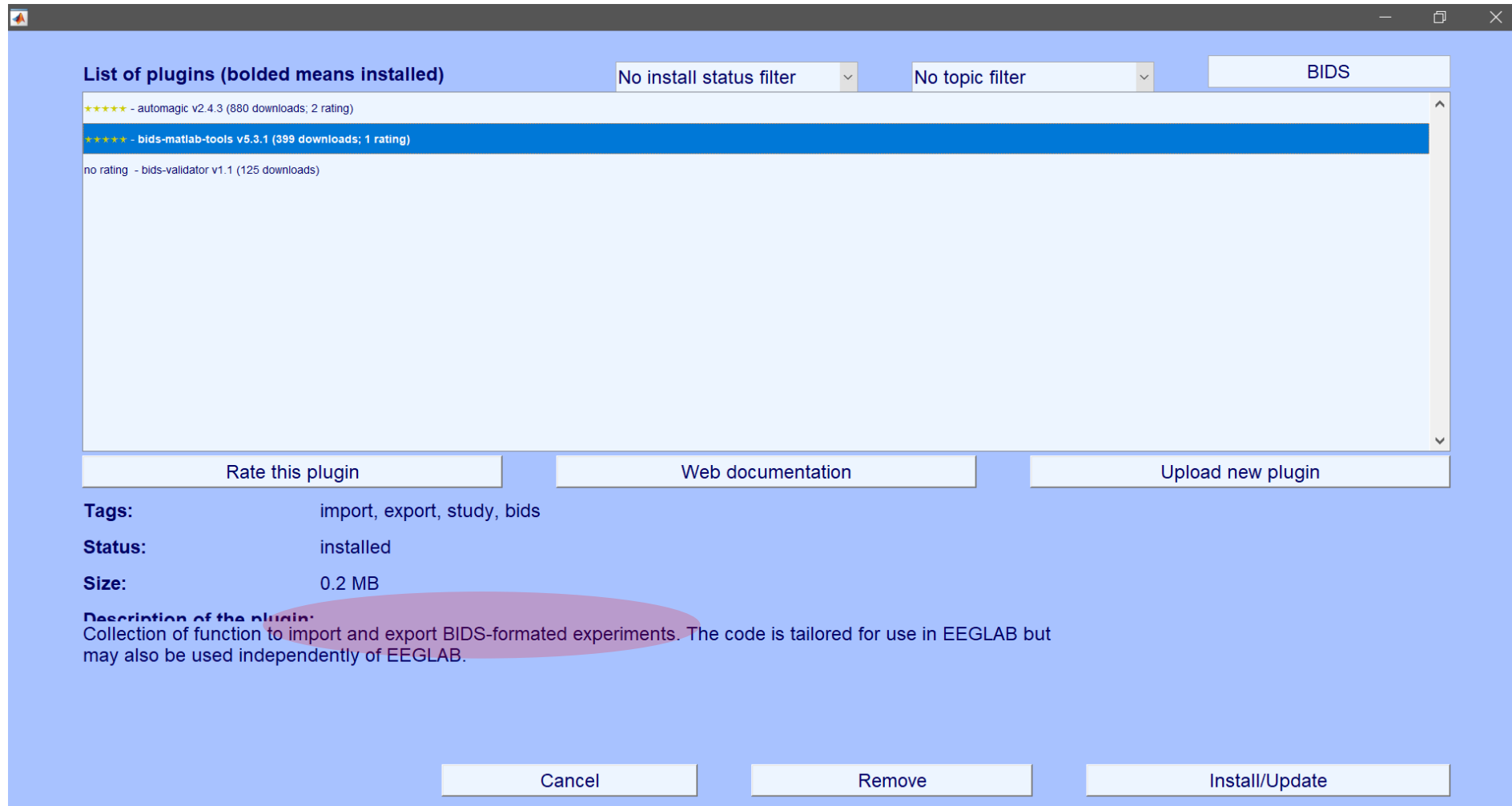
How to get started with the Brain Imaging Data Structure

A community-curated collection of tutorials, wikis, and templates to get you started with creating BIDS compliant datasets.

[BIDS Homepage](#) | [Wiki](#) | [Standard](#) | [Tutorials](#) | [Chat](#) | [Forum](#)

9 months ago

Preparing data using BIDS



The screenshot shows the MATLAB plugin manager window. At the top, there are filters: 'List of plugins (bolded means installed)', 'No install status filter', 'No topic filter', and a search box containing 'BIDS'. A list of plugins is shown below, with 'bids-matlab-tools v5.3.1 (399 downloads; 1 rating)' highlighted in blue. Below the list are buttons for 'Rate this plugin', 'Web documentation', and 'Upload new plugin'. The 'Tags' section lists 'import, export, study, bids'. The 'Status' is 'installed' and the 'Size' is '0.2 MB'. The 'Description of the plugin' states: 'Collection of function to import and export BIDS-formated experiments. The code is tailored for use in EEGLAB but may also be used independently of EEGLAB.' At the bottom, there are buttons for 'Cancel', 'Remove', and 'Install/Update'.

List of plugins (bolded means installed) No install status filter No topic filter BIDS

★★★★ - automagic v2.4.3 (880 downloads; 2 rating)
★★★★ - bids-matlab-tools v5.3.1 (399 downloads; 1 rating)
no rating - bids-validator v1.1 (125 downloads)

Rate this plugin Web documentation Upload new plugin

Tags: import, export, study, bids
Status: installed
Size: 0.2 MB

Description of the plugin:
Collection of function to import and export BIDS-formated experiments. The code is tailored for use in EEGLAB but may also be used independently of EEGLAB.

Cancel Remove Install/Update

Preparing data using BIDS

The screenshot shows a web browser at the URL `bids-standard.github.io/bids-validator/`. The browser's address bar contains a warning icon and the text "Not secure". The page title is "BIDS Validator", which is circled in red. The main content area has a heading "Select a BIDS dataset to validate" and a file selection button labeled "Choose file" with the text "No file chosen" next to it. Below this is a note: "Note: Selecting a dataset only performs validation. Files are never uploaded." A modal window titled "Face_repetition" is open, displaying a table with the following data:

Summary	Available Tasks	Available Modalities
<ul style="list-style-type: none">• 247 Files, 17.11GB• 15 - Subjects• 1 - Session		<ul style="list-style-type: none">• coordsystem• electrodes• events

Below the table, a message states: "Your dataset is not a valid BIDS dataset." Two buttons are visible: a pink one labeled "view 6 errors in 6911 files" and a yellow one labeled "view 2 warnings in 92 files".

Sharing data using BIDS

Findable

Data and supplementary materials have sufficiently rich metadata and a unique and persistent identifier.

Accessible

Data is deposited in a trusted repository.

Interoperable

(Meta)data uses a formal, shared, and broadly applicable language or format.

Reusable

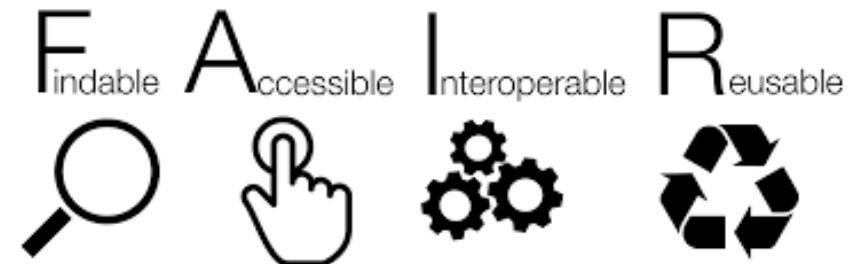
Data is described with clear and understandable attributes.

There should be a clear and acceptable license for re-use.



OpenNEURO

A free and open platform for sharing MRI, MEG, EEG, iEEG, ECoG, ASL, and PET data



<https://www.force11.org/group/fairgroup/fairprinciples>